UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,958	01/29/2004	Hiroshi Takeuchi	MIT-024-USA-P	2329

27955 7590 10/02/2006

TOWNSEND & BANTA
c/o PORTFOLIO IP
PO BOX 52050
MINNEAPOLIS, MN 55402

EXAMINER	
REESE, DAVID C	

ART UNIT	PAPER NUMBER
3677	

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/765,958	TAKEUCHI, HIROSHI	
	Examiner	Art Unit	
	David C. Reese	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 5-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

THIS NON-FINAL ACTION IS RESPONSIVE TO THE AMENDMENT FILED 7/17/2006.

- Claims 4 and 9-13 are canceled.
- Claim 8 was amended.
- Claims 1-3 and 5-8 are pending.

Claim Rejections - 35 USC § 102

[1] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[2] Claims 1-3, 5-8 are rejected under 35 U.S.C. 102(b) as clearly anticipated by SHIRAI US 5,388,290, because the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country more than one (1) year prior to the application for patent in the United States.

The shape and appearance of SHIRAI is identical in all material respects to that of the claimed design, *Hupp v. Siroflex of America Inc.*, 122 F.3d 1456, 43 USPQ2d 1887 (Fed. Cir. 1997).

As for Claim 1, SHIRAI teaches of a bendable bottom member of a bed (see figure on page 5 of this office action) comprising a plurality of side by side bars (1) bendably connected with each other to allow the whole extent of the connected bars to be curved (Fig. 2), said bars (1) being disposed generally perpendicular to the longitudinal axis of the bed, one of every adjacent two of the bars (1) is provided with a plurality of longitudinal connecting protrusions (9) being generally parallel to the longitudinal axis of the bed while a plurality of recesses (3) having a rectangular cross-section and right (10) and left (4) lateral walls and top (6) and bottom (7) walls are formed in adjacent bars (1) for accepting protrusions (9) extending from an adjacent bar (1), said protrusions (9) having an approximate rectangular cross-section and faces corresponding in configuration to the walls of said recesses (3) into which the protrusions (9) engage, in such a manner that the connecting protrusions (9) of the bars (1) can be inserted into corresponding recesses (3) of an adjacent bar (1), [whereby] (It has been held that the functional "whereby" statement does not define any structure and accordingly cannot serve to distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957)) motion of adjacent bars (1) in a vertical direction are blocked since top (6) and bottom (7) walls of each of the recesses (3) contact a top (20) and bottom (21) face of a corresponding protrusion (9) inserted therein (Fig. 7A), said protrusions (9) having at tips (26) and bases (27) thereof first (23) and second (22) beveled portions, said firsts (23) beveled portion being formed on a bottom (21) face of each protrusion (9) at its tip (26) and said second (22) beveled portion being formed on a top face (20) of each

protrusion (9) at its back (27), said first (23) and second (22) beveled portions forming clearances between the protrusions (9) and corresponding recesses (3) to allow the connecting bars (1) to be bent a preset distance in one direction only (Fig. 7A), whereby side by side bars (1) can be adjusted in their intervals (each distance between bars can be different due to the diameter of the recess, 3, and also from col. 3, beginning with line 38, "...the bottom structure contain the bottom strips can be bent and also adjusted in length in the longitudinal direction of the bed") and can be rotated in one direction up to a predetermined angle, and disengagement preventing (ends of 9) means comprising hooks (end of 9) formed at a tip of some of the connecting protrusions (9), and corresponding accepting recesses (3) having steps (12) therein adapted to engage the hooks (end of 9), so that the hooks (end of 9) and steps (12) are engaged with each other when the respective adjacent bars are kept furthest away from each other (Fig. 7A), whereby bars (1) arranged side by side can be adjusted in gaps between adjacent bars (col. 3, beginning with line 38, "...the bottom structure contain the bottom strips can be bent and also adjusted in length in the longitudinal direction of the bed"), said bars (1) being connected with each other in such a manner that they can be curved as a whole up to a limited predetermined angle in one direction only (Figs. 2, 7A).

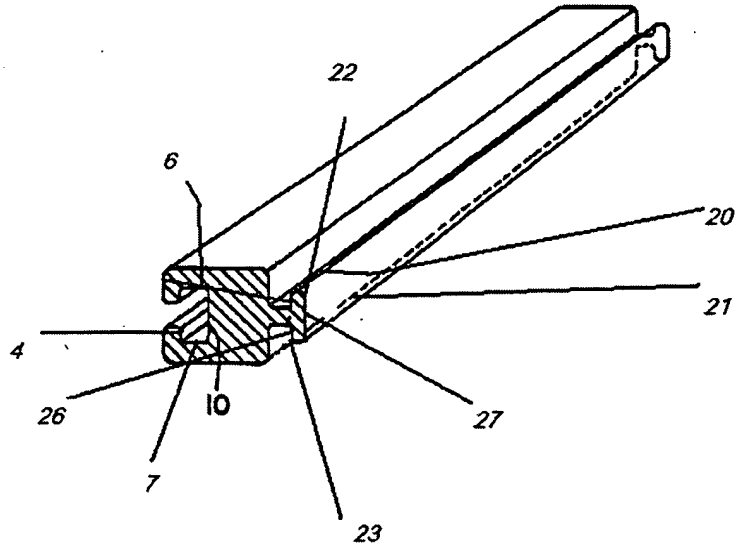
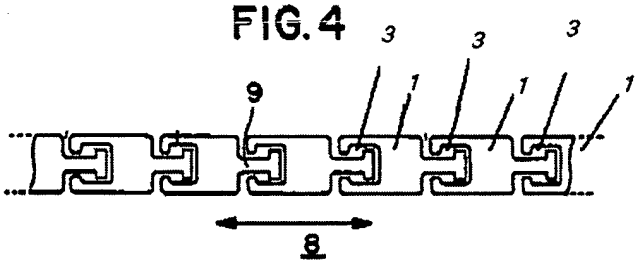


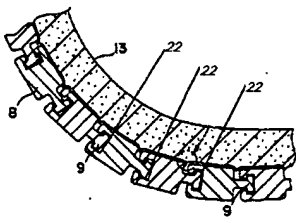
FIG. 4



Re: Claim 2, wherein a bar (1) disposed at an end of the bendable bottom member on one side has only accepting recesses (3).

Re: Claim 3, wherein first beveled portions (23) are formed on lower sides (21-bottom) at the tips (26) of the connecting protrusions (9) while second beveled portions (22) are formed on the upper sides (20-top) at the bases (11) of protrusions (9), to use the bendable bottom member as a bendable portion between the back region and the waist region.

Re: claim 5, wherein the second beveled portions (22) at the bases (27) of the connecting protrusions (9) are inclined in adaptation to the desired bending angles with the adjacent bars (1) (Fig. 7A) (see figure below).



Re: Claim 6, wherein hooks (end of 9) formed at tips of connecting protrusions (9) are provided with the disengagement preventing means (inside 12) while steps (12) to be engaged with the hooks (end of 9) are formed in the corresponding accepting recesses (3).

Re: Claim 7, wherein the second beveled portions (22) at the bases (27) of the connecting protrusions (9) are inclined in adaptation to the desired bending angles with the adjacent bars (1) (Fig. 7A).

Re: Claim 8, wherein the second beveled portions (22) at the bases (27) of the connecting protrusions (9) are inclined in adaptation to the desired bending angles with the adjacent bars (1) (Fig. 7A), and a gap being formed between every adjacent two connecting protrusions (9).

Claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson, 181 USPQ 641 (CCPA 1974).*

similar to that of Toran for a number of reasons. First, Toran discloses using a hinge connecting side by side bars 8 which are connected together by hinge pins 35. In contrast, Shirai discloses side by side bars 8 which are connected together not by a hinge as in Toran, but instead, by coupling members 9 having bulbous portions 11 at both ends of the coupling member 9 (Figs. 2-4 and 6-8), or rectangular portions 14 as in Fig. 5 of Shirai.

Further, it is respectfully submitted that the bulbous portions 11 of Shirai would not suggest this structure is equivalent to a disengagement hook formed at tips of some of the connecting protrusions as called for in the claims herein.

Additionally, it is respectfully submitted that the coupling grooves 10 of Shirai are not equivalent to corresponding recesses 22b of the present invention which are adapted to engage hooks 21b.

Moreover, it is respectfully submitted that the secondary reference of Shirai does not disclose that one of the structures disclosed therein can be shortened or extended. In this regard, Fig. 4 of Shirai shows two configurations of coupling members having different sized links. This suggests that to increase the flexure of the bed, it would be necessary to change coupling members, i.e., modify the structure, to use a larger coupling member 9 in order to obtain greater flexure of the bed..

Considering these numerous manifest differences between the bed bottom of Toran and that of Shirai, it is respectfully submitted that these references would not suggest to one of ordinary skill in the art to combine these references in the manner suggested by the Examiner. For these reasons, it is respectfully submitted that the rejection fails, as a matter of law, in view of the above authorities. Consequently, the Examiner would be justified in no longer maintaining the rejection. Withdrawal of the rejection is accordingly respectfully requested.

The Examiner's citation of references as entered on page 7 of the Office Action is noted, the

Response to Arguments

[3] Applicant's arguments filed 7/17/2006 regarding rejections under 35 U.S.C. 102 have been fully considered. Simplistically, the examiner was erroneous in stating the correct US patent number of the prior art of Shirai the previous office action, as Shirai US-5,388,290; not 5,377,369, should have been stated in the beginning of the 102 rejections as the submitted diagrams are correctly submitted from the '290 patent. Consequently, this office action is a non-final rejection.

Conclusion

[4] THIS ACTION IS NON-FINAL

[5] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached at (571) 272-7075. The fax number for the organization where this application or proceeding is assigned is the following: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Reese
Assistant Examiner
Art Unit 3677

DCR

9/19/2006

Katherine Mitchell
Primary Examiner